

California State Plan for Municipal Solid Waste Landfills

September 1997

**Emissions Assessment Branch
Stationary Source Division**

California Environmental Protection Agency

Air Resources Board
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California State Plan for Municipal Solid Waste Landfills

September 1997

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ACKNOWLEDGMENTS

This document was developed with the assistance of the Landfill Implementation Workgroup whose participation and effort have been greatly appreciated. We would particularly like to thank:

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TABLE OF CONTENTS

Contents

Page

| | |
|---|----|
| Executive Summary | 1 |
| I. <u>Introduction</u> | 5 |
| II. <u>Federal Requirements</u> | 8 |
| A. New Source Performance Standards and Emission Guidelines for Municipal Solid Waste Landfills | 8 |
| B. State Plan | 9 |
| 1. Legal Basis and Authority; Identification of Enforceable Mechanism | 9 |
| 2. Emission Standards and Compliance Schedules | 9 |
| 3. Test Methods; Monitoring; Recordkeeping and Reporting Requirements . | 10 |
| 4. Legally Enforceable Increments of Progress Towards Compliance | 10 |
| 5. Source and Emission Inventories | 10 |
| 6. Annual Emission Reporting and Progress Reports | 11 |
| 7. Public Participation | 11 |
| 8. Process for Review and Approval of Site-Specific Gas Collection and Control System Design Plans | 12 |
| III. <u>Implementation of the Emission Guidelines</u> | 13 |
| A. Implementation Mechanisms | 13 |
| B. Air Pollution Control and Air Quality Management District Implementation Commitments | 15 |
| <u>References</u> | 16 |

Attachments

- A. District Rule Review Packages and Other Relevant Information
 - 1. Amador County Air Pollution Control District (APCD)
 - 2. Antelope Valley APCD
 - 3. Bay Area Air Quality Management District (AQMD)

TABLE OF CONTENTS (Continued)

4. Butte County AQMD
 5. Calaveras County APCD
 6. Colusa County APCD
 7. El Dorado County APCD
 8. Feather River AQMD
 9. Glenn County APCD
 10. Great Basin Unified APCD
 11. Imperial County APCD
 12. Kern County APCD
 13. Lake County AQMD
 14. Lassen County APCD
 15. Mariposa County APCD
 16. Mendocino County AQMD
 17. Modoc County APCD
 18. Mojave Desert AQMD
 19. Monterey Bay Unified APCD
 20. North Coast Unified AQMD
 21. Northern Sierra AQMD
 22. Northern Sonoma County APCD
 23. Placer County APCD
 24. Sacramento Metro AQMD
 25. San Diego County APCD
 26. San Joaquin Valley Unified APCD
 27. San Luis Obispo County APCD
 28. Santa Barbara County APCD
 29. Shasta County AQMD
 30. Siskiyou County APCD
 31. South Coast AQMD
 32. Tehama County APCD
 33. Tuolumne County APCD
 34. Ventura County APCD
 35. Yolo/Solano AQMD
-
- B. Attorney General's Certification of Legal Authority
 - C. Municipal Solid Waste Landfills Affected by the Emission Guidelines
 - D. Technical Guidance Document
 - E. U.S. EPA Region IX Annual Reporting Format
 - F. California Integrated Waste Management Board's Landfill Database
 - G. Notification Letters to the Districts Concerning the New Federal Requirements

EXECUTIVE SUMMARY

On March 12, 1996, the United States Environmental Protection Agency (U.S. EPA) promulgated a regulation requiring emission controls for large municipal solid waste (MSW) landfills (61 Fed. Reg. 9905). The new regulation is entitled, “Standards of Performance for Stationary Sources and Guidelines for Control of Existing Sources: MSW Landfills.” It includes both New Source Performance Standards (NSPS) for new landfills and Emission Guidelines (guidelines) for existing landfills.

The NSPS is being implemented in many cases by the districts who have requested and secured delegation to implement and enforce the requirements. In the other districts, the U.S. EPA will implement and enforce the NSPS.

For the existing landfills, the regulation requires that the state submit a plan to the U.S. EPA which identifies how the state intends to meet the federal requirements contained in the guidelines. This document presents California’s State Plan to implement the guidelines. It was developed by the Air Resources Board (ARB) with the assistance of the air quality management and air pollution control districts (districts) and others working together as an ad hoc Landfill Implementation Workgroup.

1. What does the federal regulation require?

Both the NSPS and the guidelines require owners or operators of MSW landfills that have design capacities equal to or greater than 2.5 million megagrams (2.75 million tons or 3.27 million cubic yards) and that have estimated non-methane organic compound (NMOC) emissions of 50 megagrams (55 tons) per year or more to install a gas collection system and combust the recovered gas at 98 percent efficiency, or provide equivalent control. The federal regulation provides the owner or operator of an MSW landfill with a tiered system for determining if controls will be required. If the owner or operator initially calculates the emissions to be above the 50 megagram per year threshold by using default parameters provided in the regulation, the tiered system provides the opportunity to conduct sampling and determine site-specific values to assess whether actual emissions are below the emission threshold and that controls are not required.

2. Why was the federal regulation developed?

As the waste in a MSW landfill decomposes, it breaks down to form landfill gas which includes methane and NMOCs. Methane is a greenhouse gas, and so contributes to global warming. NMOCs include precursors to photochemical smog (ozone), odorous compounds, and

toxics. Toxics are pollutants known or suspected to cause cancer, birth defects, and other serious adverse health effects. The NSPS and guidelines are intended to significantly reduce landfill gas emissions from large landfills.

3. How many existing landfills will be affected by the guidelines?

We estimate that there are 88 MSW landfills in 21 districts that have design capacities above the criterion, and so will have to estimate their NMOC emissions. Some of these landfills will have to implement controls. There may be additional landfills that will be subject to the guidelines once the districts make their final applicability determinations.

4. What is the purpose of the State Plan?

The purpose of the State Plan is to implement the requirements of the guidelines specified in 40 Code of Federal Regulations (CFR) Part 60, Subpart Cc--Emission Guidelines and Compliance Times for MSW Landfills. The guidelines apply to existing MSW landfills that have accepted waste since November 8, 1987, or have the capacity to accept future waste and are not new (i.e., not subject to the NSPS). Section 111(d) of the federal Clean Air Act (FCAA) and 40 CFR Part 60 Subpart B (Adoption and Submittal of State Plans for Designated Facilities) require the ARB and the districts to submit a State Plan to the U.S. EPA Regional Administrator by December 12, 1996. This date has been informally extended by the U.S. EPA Region IX to allow the districts additional time to adopt their rules to implement the guidelines.

5. What are the major elements of the State Plan?

The major elements of the State Plan are: a description of the legal basis and authority to implement the guidelines, emission standards and compliance times, procedures (such as test methods) used for determining compliance with the emissions standards, legally enforceable increments of progress towards compliance, source and emission inventories of designated facilities, provisions for annual emission reporting and progress reports on enforcing the guidelines, and a description of public participation in implementing the guidelines.

6. What is the status of the guidelines implementation?

As of August 1997, 21 of the 35 districts have adopted rules, or are in the process of adopting rules, to implement the guidelines, one district would like to implement the guidelines through Title V permits; two districts have elected to have federal plans implemented; and 11 districts have certified that they have no landfills that are affected by the guidelines (see Table 1.1).

Table 1.1

**Implementation Status of the Emission Guidelines for
Municipal Solid Waste Landfills by the Districts**
(as of September 25, 1997)

| Districts (AQMD or APCD)¹ | Section 105 Grantee District² | Number of Landfills Affected by the EG³ | Proposed EG Implementation Mechanism | Proposed Rule or Permit Adoption Date |
|---|---|---|---|--|
| Amador County | No | 0 | District Rule 1000 | 2/28/97 |
| Antelope Valley | No | 1 | District Rule | Undetermined |
| Bay Area | Yes | 20 | District Rule | 4/98 |
| Butte County | No | 1 | District Rule 246 | 9/18/97 |
| Calaveras County | No | 1 | Federal Plan | * ⁴ |
| Colusa County | No | 0 | N/A ⁵ | N/A |
| El Dorado County | No | 0 | N/A | N/A |
| Feather River | No | 3 | District Rule 3.18 | 6/2/97 |
| Glenn County | No | 0 | N/A | N/A |
| Great Basin Unified | No | 0 | N/A | N/A |
| Imperial County | No | 1 | District Rule | 12/97 |
| Kern County | No | 1 | District Rule 422.1 | 11/6/97 |
| Lake County | No | 0 | District Rule 411 | 10/02/96 |
| Lassen County | No | 0 | N/A | N/A |
| Mariposa County | No | 0 | N/A | N/A |
| Mendocino County | No | 1 | District Rule | Undetermined |
| Modoc County | No | 1 | Federal Plan | * |
| Mojave Desert | No | 1 | District Rule | Undetermined |
| Monterey Bay Unified | Yes | 3 | District Rule 437 | 10/16/96 |
| North Coast Unified | No | 0 | N/A | N/A |
| Northern Sierra | No | 0 | N/A | N/A |
| Northern Sonoma County | No | 0 | N/A | N/A |

Table 1.1 (continued)

**Implementation Status of the Emission Guidelines for
Municipal Solid Waste Landfills by the Districts**
(as of September 25, 1997)

| Districts (AQMD or APCD)¹ | Section 105 Grantee District² | Number of Landfills Affected by the EG³ | Proposed EG Implementation Mechanism | Proposed Rule or Permit Adoption Date |
|---|---|---|---|--|
| Placer County | No | 1 | District Rule 237 | 6/19/97 |
| Sacramento Metropolitan | Yes | 2 | District Rule 485 | 9/4/97 |
| San Diego County | Yes | 4 | District Rule 59.1 | 12/97 |
| San Joaquin Valley Unified | Yes | 13 | Title V | Undetermined |
| San Luis Obispo County | No | 1 | District Rule | 12/97 |
| Santa Barbara County | Yes | 2 | District Rule 341 | 9/97 |
| Shasta County | No | 2 | District Rule 3:29 | 2/25/97 |
| Siskiyou County | No | 0 | N/A | N/A |
| South Coast | Yes | 25 | District Rule 1150.1 | 12/97 |
| Tehama County | No | 0 | District Rule 4:33 | 6/3/97 |
| Tuolumne County | No | 0 | N/A | N/A |
| Ventura County | Yes | 3 | District Rule 74.17.1 | 11/97 |
| Yolo-Solano | No | 1 | District Rule 2.38 | 3/12/97 |

1. Air Quality Management District or Air Pollution Control District (District).
2. These districts enter into a cooperative agreement with the United States Environmental Protection Agency and receive special funding in return for submitting information as specified in the federal Clean Air Act or required by the U.S. EPA Region IX.
3. 40 CFR Part 60, Subpart Cc--Emission Guidelines (EG) and Compliance Times for Municipal Solid Waste (MSW) Landfills.
4. District decided not to adopt a plan to implement the Emission Guidelines. This means that the U.S. EPA will promulgate a Federal plan for the district.
5. Districts that do not have any municipal solid waste landfills affected by the Emission Guidelines and are only required to submit a letter to the Air Resources Board certifying that this is the case.

I.

INTRODUCTION

This is California's State Plan for implementing the guidelines for existing MSW landfills as required by the federal regulation promulgated on March 12, 1996, pursuant to the authority of Section 111(d) of the FCAA. Section 111(d) requires the ARB and the districts to develop a State Plan for implementing and enforcing the guidelines.

The regulation is entitled "Standards of Performance for Stationary Sources and Guidelines for Control of Existing Sources: MSW Landfills." The new federal regulation amends 40 CFR Parts 51, 52, and 60. The purpose of the regulation is to control landfill gas emissions from MSW landfills. Landfill gas contains NMOCs, methane, and odorous compounds. NMOCs contribute to smog formation and some are known or suspected carcinogens. Methane emissions may contribute to global warming as a greenhouse gas. In addition, landfill gas emissions can cause odor problems. The regulation seeks to limit landfill gas emissions by adopting NMOC emissions guidelines and requiring landfill gas emission control at landfills which exceed criteria specified by these guidelines. By controlling NMOC emissions, methane, and toxic compound emissions are also controlled.

The new federal regulation includes both the NSPS (Subpart WWW) for new landfills and guidelines (Subpart Cc) for existing landfills. The guidelines apply to MSW landfills that commenced construction, modification, or reconstruction before May 30, 1991, and that have accepted waste at any time since November 8, 1987, or have additional capacity for future waste deposition. The NSPS applies to MSW landfills that commenced construction, modification, or reconstruction on or after May 30, 1991. Landfills subject to the NSPS are not required to be addressed by the State Plan. The NSPS and the guidelines specify that the owner or operator of an MSW landfill meeting certain size and emission criteria must install a gas collection system and combust the recovered gas at 98 percent efficiency for NMOCs or provide equivalent control.

Subpart B of 40 CFR Part 60 contains additional criteria for what is to be included in the State Plan. The State Plan must contain emission standards and compliance times, procedures (such as test methods) used for determining compliance with the emissions standards, legally enforceable increments of progress towards compliance, source and emission inventories of all designated facilities, and provisions for annual emission reporting and progress reports on

enforcing the guidelines. The ARB is required to develop a State Plan and submit it to the U.S. EPA Regional Administrator for approval.

In a letter dated June 21, 1996, the ARB notified the districts of the new requirements and invited the districts to participate in a technical workgroup to interpret and implement the guidelines and to discuss the development of the State Plan (see Attachment G). The landfill workgroup consisted of representatives from 27 of the 35 districts, the California Integrated Waste Management Board (CIWMB), the State Water Resources Control Board, the U.S. EPA, and the ARB. Representatives of environmental consulting firms and solid waste management associations were also invited to participate in the workgroup. Specifically, the workgroup identified major issues and compliance options, assessed the equivalency of district landfill rules with the guidelines, and developed recommendations in the form of a brief technical assistance document for implementing the guidelines. The workgroup identified two basic alternatives that districts can choose from to implement the guidelines: the district can either adopt a district rule, or be subject to a Federal Plan promulgated by the U.S. EPA. Other alternatives that may be acceptable to the U.S. EPA are implementation through Title V permits and district permits.

In a letter dated December 4, 1996, the ARB advised the districts of the various options and information that must be included in the State Plan (see Attachment G). Based on the information received by the districts, the ARB has developed the State Plan. This document presents the strategies chosen by the districts to implement and enforce the requirements of the guidelines.

The State Plan is organized as follows:

Attachment A. This section contains draft or adopted rules that were developed by the district to implement the guidelines, design capacity and NMOC emissions rate information for landfills under the jurisdiction of the district, and letters from those districts certifying that they have no landfills that are subject to the guidelines.

Attachment B. This section contains the Attorney General's certification that the laws of California provide adequate authority to adopt and implement the emission standards and compliance schedules of the guidelines.

Attachment C. This section provides a listing of municipal solid waste landfills that are affected by the guidelines.

Attachment D. This section contains the technical guidance developed by the ARB staff and the Landfill Implementation Workgroup. The technical guidance was developed to assist the districts in adopting their rules to implement the guidelines.

Attachment E. This section contains the reporting format that the districts will use to report their progress in implementing the guidelines and their landfill NMOC emissions updating.

Attachment F. This section contains the CIWMB's database of landfills in California.

Attachment G. This section contains letters to the districts concerning the federal requirements for municipal solid waste landfills.

II.

FEDERAL REQUIREMENTS

A. NEW SOURCE PERFORMANCE STANDARDS AND EMISSION GUIDELINES FOR MUNICIPAL SOLID WASTE LANDFILLS

The U.S. EPA promulgated the NSPS and guidelines for MSW Landfills to implement sections 111(b) and 111(d) of the FCAA, respectively. The guidelines require a state to submit a plan that establishes standards and compliance schedules for existing landfills (e.g., standards for the landfill gas collection/control device and compliance schedule for installing controls). The guidelines establish minimum criteria that a state is to use in developing its emissions standards. Because districts are responsible under California law for implementing the requirements for stationary sources such as landfills, it is the responsibility of the districts to submit implementation plans to the U.S. EPA through the ARB. Therefore, ARB and the districts are responsible for developing a plan for implementing the guidelines and submitting the plan to the U.S. EPA Administrator for approval.

The NSPS defines a “new MSW landfill” as one that commenced construction, reconstruction or modification, or began accepting waste on or after May 30, 1991. An existing MSW landfill subject to the requirements of the guidelines is a landfill that commenced construction, reconstruction, or modification before May 30, 1991, and that either has accepted waste at any time since November 8, 1987, or has additional design capacity for future waste deposition.

The requirements of the guidelines are identical to the NSPS, except for the applicability requirements and implementation schedules. The NSPS and the guidelines require that the owners or operators of affected MSW landfills having design capacities below 2.5 million megagrams or 2.5 million cubic meters file a design capacity report. Owners or operators of affected MSW landfills having design capacities equal to or greater than 2.5 million Mg must also calculate and submit a report on their landfill’s annual NMOC emissions. Those MSW landfills that emit 50 megagrams per year (Mg/yr) or more of NMOCs are required to install gas collection systems and combust the recovered gas at 98 percent efficiency, or provide equivalent control. Alternative controls are acceptable, provided they achieve an equivalent reduction in emissions. Owners and operators of MSW landfills that are subject to the guidelines are not required to comply with its requirements until such time the U.S. EPA has approved the State Plan or promulgated a federal plan for the district if the district failed to submit its own plan through the ARB.

B. STATE PLAN

The State Plan required to be developed by the ARB and the districts under section 111(d) of the FCAA and 40 CFR Part 60 Subpart B must include the major components listed below.

1. Legal Basis and Authority; Identification of Enforceable Mechanism

The State Plan must include a demonstration of the state's legal authority to adopt and implement the emission standards and compliance schedules in the State Plan. California Health and Safety Code section 40000 states that the districts have primary responsibility for control of stationary sources. In Appendix B, the state Attorney General certifies that the laws of California provide adequate authority to: (1) establish emission standards and enforceable permit conditions applicable to the designated facilities and pollutants identified under the guidelines for MSW landfills promulgated by the U.S. EPA pursuant to section 111(d) of the FCAA on March 12, 1996 (61 Fed. Reg. 9905), (2) adopt compliance schedules applicable to the designated facilities, and (3) implement and enforce the relevant laws, regulations, standards and compliance schedules. In California, the districts will be responsible for carrying out the requirements of the State Plan. Each district must identify the enforceable mechanism that will be used to implement the guidelines, such as a district regulation.

2. Emission Standards and Compliance Schedules

The emission standards adopted by the districts cannot be less stringent than the guidelines. However, some flexibility is offered to districts under 40 CFR Part 60 Subpart B, section 60.24(f), where districts on a case-by-case basis may apply less stringent emission standards or longer compliance schedules in their district rules. To use this provision, districts have to demonstrate to the U.S. EPA Regional Administrator the need for flexibility based on a class of landfills meeting one or more of the following criteria:

- the cost of control would be unreasonable because of the facility's age, location, or basic process design;
- it would be physically impossible to install the necessary control equipment; or
- there are other factors specific to the facility or class of facilities that make application of a less stringent standard or final compliance time significantly more reasonable.

As per 40 CFR Part 60 Subpart B, Adoption and Submittal of State Plans for Designated Facilities, section 60.24(c), compliance schedules must match those of the

guidelines and should not extend later than 30 months after the effective date of the state emission standard, or 30 months after the date the annual NMOC emission rate equals or exceeds 50 Mg/yr, whichever is later.

3. Test Methods; Monitoring, Recordkeeping and Reporting Requirements

The State Plan must contain test methods and procedures for determining compliance with the emission standards. Districts can choose test methods or procedures that are different than those specified in 40 CFR Part 60, Appendix A. However, the test methods or procedures must be shown to be equivalent to the federal requirements including monitoring, recordkeeping, and reporting procedures.

4. Legally Enforceable Increments of Progress Towards Compliance

Rules or other mechanisms developed by the districts to implement the guidelines must include enforceable compliance dates for submitting the final control plan, awarding contracts for construction of the control system, initiating on-site construction or installation of the control system, completing on-site construction or installation of the control system, and final compliance.

5. Source and Emission Inventories

The U.S. EPA requires the ARB and the districts to submit a complete source and emissions inventory of existing MSW landfills in California that are regulated by the guidelines. This information must be submitted as part of the State Plan.

The source inventory must include all existing landfills MSW landfills that have accepted waste since November 8, 1987. For the purpose of the State Plan, the source inventory must include MSW landfills with design capacities both above and below the 2.5 million Mg or 2.5 million m³ design capacity cutoff. The inventory must include the names and locations of the landfills and their design capacities if this information is available.

An emission inventory that is based on the MSW landfills in the source inventory must be included as part of the State Plan. The emission inventory must provide estimates of the NMOC emissions from the large MSW landfills that are subject to the guidelines. Attachment A contains both source and emissions inventory information. Attachment C contains a listing of MSW landfills in California that are subject to the guidelines. The U.S. EPA has recently determined that states are not required to submit emission inventories for MSW landfills having design capacities below 2.5 million Mg where the development of such data would be unreasonable and impractical (see Attachment F). This is the case for California which has an estimated 1,868 landfills. However, the ARB has collected available information on smaller landfills in the form of a database from the

CIWMB. This database contains site activity and site owner/operator information. It is included in Attachment F.

6. Annual Emission Reporting and Progress Reports

As a component of the State Plan, districts must make a commitment to submit annual progress reports to the U.S. EPA on the progress of enforcing the guidelines, per 40 CFR Part 60, Subpart B, sections 60.25 (a), (e) and (f). Each progress report must include: summaries of enforcement actions, a summary of progress, updated NMOC emission inventories for MSW landfills that are subject to the guidelines, and copies of technical reports on all performance testing and compliance information.

The ARB is currently working with the U.S. EPA to determine the appropriate reporting format and procedures for annual progress reports. The ARB believes that the annual reporting requirements can be satisfied by the districts entering their NMOC emissions and enforcement data into the ARB's California's Emission Inventory Development and Reporting System II (CEIDARS II) and the Aerometric Information Retrieval System/Airs Facility Subsystem (AIRS/AFS) database systems, respectively (see Attachment E). The ARB routinely tracks various emission and enforcement data. This information is submitted to the U.S. EPA on a quarterly basis. Therefore, through the reporting of data to CEIDARS II and AIRS/AFS, the ARB and the districts should fulfill the annual progress report requirement.

Another possible way to satisfy the annual reporting requirement may be the use of reports submitted by holders of Title V operating permits. Title V requires subject sources to apply for a Title V permit within one year of the approval date of the State Plan or earlier if required by the district. Landfills that are subject to control requirements under the guidelines are also subject to Title V requirements. As required by Title V, responsible officials must certify compliance with all applicable federal requirements and submit reports annually to the districts and the U.S. EPA. Permit violations (including compliance schedule violations) must be reported every six months to the district. The annual reporting required under Title V is very similar to that required under the guidelines and may satisfy Subpart B annual reporting requirements.

7. Public Participation

Adopting the State Plan requires public participation through public hearings or alternative procedures.¹ At this time, most of the districts have indicated that they will be adopting rules to implement the guidelines. Adoption of district rules requires public hearings and other public participation procedures (Health and Safety Code sections

¹ See 40 CFR Part 60 Subpart B, section 60.23.

40725 and 40726). Other districts are considering the use of Title V permits or district operating permit modification as a way to implement the guidelines. However, district operating permit modification does not necessarily require public participation. Therefore, any district that uses this approach would have to hold a public hearing or other public participation proceedings in order to satisfy the requirements of 40 CFR Subpart B section 60.23(g). The U.S. EPA may oppose State/district procedures that do not provide for adequate public notice and participation. Because the districts' rulemaking process incorporates the public participation process, the ARB believes it is unnecessary to require additional public review and comment on the State Plan as a whole.

8. Process for Review and Approval of Site-Specific Gas Collection and Control System Design Plans

The State Plan must include a process for the review and approval of site-specific design plans for the required collection and control systems.² If a landfill's NMOC emissions equal or exceed 50 Mg/yr, the landfill owner or operator must submit a site-specific design plan within one year in accordance with 40 CFR 60.752(b)(2) of Subpart WWW. The plan must also meet the design specifications for active collection systems in 40 CFR 60.759 or include alternative provisions as provided for in 40 CFR 60.752(b)(2). This requirement will be satisfied through district rules that were developed to implement the guidelines. In these rules, the Air Pollution Control Officer has the authority to review and to approve or disapprove the site-specific design plan and any alternative provisions. In addition, Title V and district operating permit procedures provide for review and approval of permit terms and conditions that would include site-specific provisions of a design plan.

² See 40 CFR 60.33c(b).

V.

IMPLEMENTATION **OF THE EMISSION GUIDELINES**

A. IMPLEMENTATION MECHANISMS

In order to prepare an adequate State Plan, the ARB and the districts had to first determine how many sources would be impacted by the guidelines and what enforceable mechanisms could be used to implement the guidelines. This information is shown in Table 1.1 of the State Plan. The technical workgroup identified the following implementation mechanisms that could be used to accomplish the goal of implementing the guidelines:

- 1. The Districts Adopt Rules to Make Existing Landfills Subject to the Requirements.** Because the guidelines were not written in regulatory format, it is not possible for the districts to adopt them directly by reference. However, districts could adopt rules that would make existing landfills subject to the requirements of the NSPS. The control requirements of the guidelines are identical to those of the NSPS, except for the implementation schedule and applicability criteria. Many districts chose to use this approach because it is expeditious and provides consistent emission standards for both new and existing landfills.

In cooperation with the technical workgroup, the ARB staff developed technical guidance (Attachment D) that can be used by districts that choose to adopt a rule that satisfies the guidelines. This language was based on draft rules that were developed by the Yolo-Solano Air Quality Management District and the Monterey Bay Unified Air Pollution Control District. To avoid the possible confusion of having or replacing multiple landfill rules, districts with existing landfill rules in place may consider repealing their rules or amending them by using the technical guidance in Attachment D.

- 2. The U.S. EPA Adopts a Federal Plan.** The U.S. EPA could implement a federal plan containing the source requirements of the guidelines for districts that do not adopt a rule. These requirements would be incorporated into the landfill's Title V permit, and then be enforced by the district as the Title V permitting authority.
- 3. Use of Title V Permits.** Sources that are subject to the FCAA section 111(d) standards are also subject to Title V requirements. Title V requires subject sources to

apply for a Title V permit within one year of the approval date of the State Plan or earlier if required by the permitting authority. The San Joaquin Valley Unified Air Pollution Control District is considering the possibility of complying with the guidelines by incorporating the control requirements into the Title V permit for subject existing landfills.

However, the U.S. EPA has said that to use such a Title V approach to implement the guidelines, sources would have to apply for their Title V permits immediately so that permit terms and conditions could be reviewed and approved by the U.S. EPA as part of the State Plan approval. This could require a district to issue a permit to the source prior to the normally scheduled time. The control requirements for the source would have to be incorporated into its Title V permit.

The Attorney General has determined that the State and the districts have authority to use Title V permits as an enforceable mechanism for implementing the guidelines (see Attachment B). If an APCO determines that a landfill is a nuisance based on the district's nuisance rule, the APCO has the authority to incorporate the requirements of the guidelines into the source's Title V permit as permit conditions.

In order to use a permitting approach, the U.S. EPA has stated that the permit would have to be issued by the district and incorporated into the State Plan in order to be approved by the U.S. EPA. Once the State Plan was approved, permit terms and conditions implementing the guidelines would be federally enforceable terms and conditions.

4. Use of District Operating Permits. If an MSW landfill has a district operating permit, the district could incorporate the requirements of the guidelines into the facility's permit provided that:

- ▶ The source agrees to have the requirements of the guidelines incorporated into the permit, or
- ▶ the APCO determines that the landfill is a nuisance based on the district's nuisance rule and incorporates the requirements as permit terms and conditions in the landfill's district operating permit.

The Attorney General has determined that the State and districts have the authority to ensure the guideline requirements are met through a district operating permit. If a district chooses to use district operating permits as an implementation mechanism, public participation procedures would be necessary to satisfy Subpart B requirements.

B. AIR POLLUTION CONTROL AND AIR QUALITY MANAGEMENT DISTRICT IMPLEMENTATION COMMITMENTS

California has approximately 1,868 landfills statewide (ARB, 1990). Based on design capacity information obtained from the CIWMB (CIWMB, 1995), the ARB in consultation with the districts has determined that 21 districts have at least 88 landfills under their jurisdiction that are affected by the guidelines. Additional landfills may be found to be affected by the guidelines once the districts have made their final applicability determinations. The districts with affected landfills are identified in Attachment C. Districts without any large MSW landfills that are affected by the guidelines were only required to submit a letter to the ARB certifying that this is the case. However, they were to include source inventory information for all the MSW landfills under their jurisdiction. Copies of these letters and additional source/emission inventory information are included in Attachment A. A CIWMB database file containing a detailed listing of landfills statewide can be found in Attachment F. Landfills that are subject to the guidelines but then decide to close need to meet the closure requirements that are specified in the guidelines. Reports of any closures would be a part of the annual reporting to the U.S. EPA by the districts.

REFERENCES

- ARB, 1990. "The Landfill Testing Program: Data Analysis and Evaluation Guidelines."
Sacramento, California: Air Resources Board, Stationary Source Division.
- CIWMB, 1995. Appendix D, Table D-1, Inventory of Integrated Waste Management Board's
Recent Disposal Site Information and Related Documents Beginning July 15, 1995.
p. 1-6.